ecology and environment, inc.
12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900
International Specialists in the Environment

M E M O R A N D U M

TO: Ralph Dollhopf, On-Scene Coordinator, U. S. Environmental Protection Agency

FROM: Herbert B. Langer, Technical Assistance Team Member, Ecology and Environment

DATE: April 25, 1994

SUBJECT: Cyb Tool Site Assessment Report Comments

On October 4, 1993, Ecology and Environment completed a site assessment report regarding the Cyb Tool Site that was delivered to OSC Ralph Dollhopf. On April 18, 1994, OSC Dollhopf requested this memo to clarify questions he had regarding the report.

The site activity map, Figure 2, shows site features and where excavations occurred. The term "excavation" was used to describe intrusive work where one hole was dug directly and vertically through the fill materials to the virgin soil. This type of excavation was performed when looking for specific items, like the lagoon and buried containers. The term "trench" was used in the report to describe excavations dug from a starting point laterally to an end point in order to expose large cross sections of the fill.

In appendix A of the report are the data reports generated by the laboratory from the samples collected at the site. Matrices are not usually reported to the laboratory by the collectors to avoid biasing the laboratory to look for specific items based on the type of matrix (e.g., waste, oil, soil, etc). The physical state of the samples collected from the site that were analyzed for PCBs was described by the laboratory as water. After questioning the laboratory regarding this, the laboratory reported that "water" was a typographical error. During the review, the reviewer had examined the units for correctness but did not notice the matrix description error. In all cases, other than the analyses for PCBs, the laboratory correctly reported the sample matrices as "soil". Field reporting and photographs completed at the time of sample collection, describe samples collected from the containers as wastes that had homogenized with the surrounding soils through the years.

If there are any other questions regarding the report please feel free to contact us.

Midwestern Operations

22345 Roethel Drive
P.O. Box 8022
Novi, MI 48375
(810) 344-1770
Fax (810) 344-2654

Clayton
ENVIRONMENTAL
CONSULTANTS

April 22, 1994

Mr. Herb Langer
ECOLOGY & ENVIRONMENT, INC.
12251 Universal
Taylor, MI 48180

Clayton Project No. 90406-17
REVISED REPORT

Dear Mr. Langer:

The following is our revised report for the samples received on August 6, 1993. The sample matrix for the PCB samples has been corrected. The results and analytical methods used are presented in the attached tables.

We appreciate the opportunity to be of assistance to you. If you have any questions, please call me or our Client Services Department at (810) 344-2650.

Sincerely,

Robert Lieckfield, Jr., CIH
Director, Midwestern Analytical Services

RL/km
Attachments

Analytical Results

for

ECOLOGY & ENVIRONMENT

Clayton Project No. 90406-17

Sample Matrix: Soil
Lab Number: 161077
Sample Identification: CT-1, WEST LAGOON
Analytical Method: EPA 8080 (modified)
Moisture (%): 70

Compound Name	Concentration (μg/kg) *	Limit of Detection (μg/kg)
PCB Aroclor-1016	<200	200
PCB Aroclor-1221	<400	400
PCB Aroclor-1232	<200	200
PCB Aroclor-1242	<200	200
PCB Aroclor-1248	1,500	200
PCB Aroclor-1254	200	200
PCB Aroclor-1260	<200	200

* Results are reported on a dry-weight basis.

Limit of detection may vary due to matrix effects and presence of Aroclor-1248 and Aroclor-1254.

Date extracted: 08-10-93
Date analyzed: 08-20-93

Clayton
ENVIRONMENTAL
CONSULTANTS

Analytical Results

for

ECOLOGY & ENVIRONMENT

Clayton Project No. 90406-17

Sample Matrix: Soil
Lab Number: 161078
Sample Identification: CT-2, CENTER HILSIDE
Analytical Method: EPA 8080 (modified)
Moisture (%): 9

Compound Name	Concentration (μg/kg) *	Limit of Detection (μg/kg)
PCB Aroclor-1016	<40	40
PCB Aroclor-1221	<70	70
PCB Aroclor-1232	<40	40
PCB Aroclor-1242	<40	40
PCB Aroclor-1248	<40	40
PCB Aroclor-1254	60	40
PCB Aroclor-1260	70	40

* Results are reported on a dry-weight basis.

Date extracted: 08-10-93
Date analyzed: 08-18-93

Analytical Results

for

ECOLOGY & ENVIRONMENT

Clayton Project No. 90406-17

Sample Matrix: Soil
Lab Number: 161079
Sample Identification: CT-3, EAST HILLSIDE
Analytical Method: EPA 8080 (modified)
Moisture (%): 8

Compound Name	Concentration (µg/kg) *	Limit of Detection (µg/kg)
PCB Aroclor-1016	<70	70
PCB Aroclor-1221	<100	100
PCB Aroclor-1232	<70	70
PCB Aroclor-1242	<70	70
PCB Aroclor-1248	<70	70
PCB Aroclor-1254	300	70
PCB Aroclor-1260	70	70

* Results are reported on a dry-weight basis.

Date extracted: 08-10-93
Date analyzed: 08-20-93

Analytical Results

for

ECOLOGY & ENVIRONMENT

Clayton Project No. 90406-17

Sample Matrix: Soil
Lab Number: 161080
Sample Identification: CT-4, SECOND CONTAINER
Analytical Method: EPA 8080 (modified)
Moisture (%): 27

Compound Name	Concentration (µg/kg) *	Limit of Detection (µg/kg)
PCB Aroclor-1016	<200	200
PCB Aroclor-1221	<400	400
PCB Aroclor-1232	<200	200
PCB Aroclor-1242	<200	200
PCB Aroclor-1248	500	200
PCB Aroclor-1254	800	200
PCB Aroclor-1260	200	200

* Results are reported on a dry-weight basis.

Limit of detection varies due to presence of Aroclor-1248 and Aroclor-1254.

Date extracted: 08-10-93
Date analyzed: 08-19-93

Analytical Results

for

ECOLOGY & ENVIRONMENT

Clayton Project No. 90406-17

Sample Matrix: Soil
Lab Number: 161081
Sample Identification: CT-5, FIRST CONTAINER
Analytical Method: EPA 8080 (modified)
Moisture (%): 13

Compound Name	Concentration (μg/kg) *	Limit of Detection (μg/kg)
PCB Aroclor-1016	<80	80
PCB Aroclor-1221	<200	200
PCB Aroclor-1232	<80	80
PCB Aroclor-1242	<80	80
PCB Aroclor-1248	200	80
PCB Aroclor-1254	200	80
PCB Aroclor-1260	100	80

* Results are reported on a dry-weight basis.

Limit of detection varies due to matrix effects.

Date extracted: 08-10-93
Date analyzed: 08-20-93

Ecology and Environment, Inc.
Field Sample Data Sheet

Site Name Cyclo Tool County Wayne State MI

Collectors Dunn, Dieckhaus, Langer EPA Site #

Sample # CT1 Date Collected 6/13/93 Temperature 65 °F

Sample Tag # Time ~~09:05~~ 0945

TRANSECT INFORMATION

Letter Compass Direction -

Station # Distance Between Stations to = ft.

GROUNDWATER
Water Table Depth ft.
Sample Depth ft.
Color
Odor
Oil
Device

SOIL
Device:
Auger
Core Backhoe
Split Spoon
Cylinder Cup
Spade
Depth 17' 6" ~~ft or in~~
Soil Type
Rock Silt
Gravel Muck
Sand Loam
Clay Peat
Color Green

SURFACE WATER
Color Odor
Temp pH
Stream Data (measure after sample collection)
Width ft
Depth ft or in
Velocity ft/sec
Flow Direction
Device:
Kemmerer
Bucket
Direct
Surface
Bottom

WASTE
Color Odor
Solid-Sludge-Liquid
Device:
Bucket
Trowel
Core
Other

AIR
Media
Wind Dir.
Barom. Press.
Time Ran min
Avg Flow Rate l/min
Device

SEDIMENT
Color: Odor:
Bottom:
Ooze Sand
Gravel Clay
Rock Shell
Organic
Device:
Ponar
Eckman
Bucket
Trowel

SAMPLE PREPARATION

Container/Size:
Glass Jar
Plastic Jar
~~Acetate~~ Core
Teflon Cap
Foil Cap

Storage:
Wet Ice
Dry Ice
Ambient

Preservative Added:
H_2SO_4
NaOH
HNO_3
Other

Cleaning Procedure:
Low-High Concentration
Detergent Wash
Hexane Rinse
Other Solvent Rinse-specify
Water Rinse
Acetone Rinse

ANALYSIS

Organics:
Volatiles
Base/Neutral
Acid
Pesticide
PCB
~~TCLP~~ Organics

Inorganics:
Total Metals
Cyanide Lotus Hach
TCLP Metals

RCRA:
Ignitability
Corrosivity
Reactivity
Other

REMARKS

Collected from green soil at 17' 6"

Ecology and Environment, Inc.
Field Sample Data Sheet

Site Name Cyb Tail County Wayne State MI

Collectors Darro, Deckhaus, Langer EPA Site # Cyb Tail

Sample # CT2 Date Collected 8/4/93 Temperature 65 °F

Sample Tag # Time 08:45

TRANSECT INFORMATION

Letter Compass Direction -

Station # Distance Between Stations to = ft.

GROUNDWATER

Water Table Depth ft.
Sample Depth ft.
Color
Odor
Oil
Device

SOIL

Device:
Auger Track hoe
Core
Split Spoon
Cylinder Cup
Spade
Depth 6 ft or in
Soil Type
Rock Silt
Gravel Muck
Sand Loam
Clay Peat
Color Brown

SURFACE WATER

Color Odor
Temp pH
Stream Data (measure after sample collection)
Width ft
Depth ft or in
Velocity ft/sec
Flow Direction
Device:
Kemmerer
Bucket
Direct
Surface
Bottom

WASTE

Color Odor
Solid-Sludge-Liquid
Device:
Bucket
Trowel
Core
Other

AIR

Media
Wind Dir.
Barom. Press.
Time Ran min
Avg Flow Rate l/min
Device

SEDIMENT

Color: Odor:
Bottom:
Ooze Sand
Gravel Clay
Rock Shell
Organic
Device:
Ponar
Eckman
Bucket
Trowel

SAMPLE PREPARATION

Container/Size:
Glass Jar
Plastic Jar
Acetate Core
Teflon Cap
Foil Cap

Storage:
Wet Ice
Dry Ice
Ambient

Preservative Added:
H_2SO_4
NaOH
HNO_3
Other

Cleaning Procedure:
Low-High Concentration
Detergent Wash
Hexane Rinse
Other Solvent Rinse-specify
Water Rinse
Acetone Rinse

ANALYSIS

Organics:
Volatiles
Base/Neutral
Acid
Pesticide
PCB
TCLP Organics

Inorganics:
Total Metals
Cyanide
TCLP Metals

RCRA:
Ignitability
Corrosivity
Reactivity
Other

REMARKS

3' below platen/top of excavation 6

Ecology and Environment, Inc.
Field Sample Data Sheet

Site Name Cyb Tda County Wayne State MI

Collectors Dunca, Langar, Dunn EPA Site #

Sample # CT3 Date Collected 8/14/93 Temperature 70°F

Sample Tag # Time 1000

TRANSECT INFORMATION

Letter Compass Direction -

Station # Distance Between Stations to = ft.

GROUNDWATER

Water Table Depth ft.
Sample Depth ft.
Color
Odor
Oil
Device

SOIL

Device:
- Auger Trackhoe
- Core
- Split Spoon
- Cylinder Cup
- Spade

Depth 6 ft or in
Soil Type
- Rock / Silt
- Gravel / Muck
- Sand / Loam
- Clay / Peat

Color Brown/Gray

SURFACE WATER

Color Odor
Temp pH
Stream Data (measure after sample collection)
Width ft
Depth ft or in
Velocity ft/sec
Flow Direction
Device:
- Kemmerer
- Bucket
- Direct

Surface
Bottom

WASTE

Color Odor
Solid-Sludge-Liquid
Device:
- Bucket
- Trowel
- Core
- Other

AIR

Media
Wind Dir.
Barom. Press.
Time Ran min
Avg Flow Rate l/min
Device

SEDIMENT

Color: Odor:
Bottom:
- Ooze / Sand
- Gravel / Clay
- Rock / Shell
- Organic

Device:
- Ponar
- Eckman
- Bucket
- Trowel

SAMPLE PREPARATION

Container/Size:
- Glass Jar
- Plastic Jar
- Acetate Core
- Teflon Cap
- Foil Cap

Storage:
- Wet Ice
- Dry Ice
- Ambient

Preservative Added:
- H_2SO_4
- NaOH
- HNO_3
- Other

Cleaning Procedure:
- Low-High Concentration
- Detergent Wash
- Hexane Rinse
- Other Solvent Rinse-specify

Water Rinse
Acetone Rinse

ANALYSIS

Organics:
- Volatiles
- Base/Neutral
- Acid
- Pesticide
- PCB
- TCLP Organics

Inorganics:
- Total Metals
- Cyanide
- TCLP Metals

RCRA:
- Ignitability
- Corrosivity
- Reactivity
- Other

REMARKS

Ecology and Environment, Inc.
Field Sample Data Sheet

Site Name Cyb Tool County Wayne State MI

Collectors Dunn, Deckhaus, Langa EPA Site # _____

Sample # CT4 Date Collected 8/4/94 Temperature 70 °F

Sample Tag # _____ Time 1220

TRANSECT INFORMATION

Letter _____ Compass Direction _____ - _____

Station # _____ Distance Between Stations _____ to _____ = _____ ft.

GROUNDWATER

Water Table Depth ___ ft.
Sample Depth _____ ft.
Color _____
Odor _____
Oil _____
Device _____

SOIL

Device:
- Auger
- Core
- Split Spoon
- Cylinder Cup
- Spade

Depth _____ ft or in

Soil Type
- Rock
- Gravel
- Sand
- Clay
- Silt
- Muck
- Loam
- Peat

Color _____

SURFACE WATER

Color _____ Odor _____
Temp _____ pH _____
Stream Data (measure after sample collection)
Width _____ ft
Depth _____ ft or in
Velocity _____ ft/sec
Flow Direction _____
Device:
- Kemmerer
- Bucket
- Direct

Surface _____
Bottom _____

WASTE

Color ~~Gray~~ Odor N/A
Solid-~~Sludge~~-Liquid
Device:
- Bucket
- ~~Trowel~~ PID 1100 units
- Core
- Other Trackhoe

AIR

Media _____
Wind Dir. _____
Barom. Press. _____
Time Ran _____ min
Avg Flow Rate _____ l/min
Device _____

SEDIMENT

Color: Odor:
Bottom:
- Ooze
- Gravel
- Rock
- Organic
- Sand
- Clay
- Shell

Device:
- Ponar
- Eckman
- Bucket
- Trowel

SAMPLE PREPARATION

Container/Size:
- ~~Glass Jar~~
- Plastic Jar
- Acetate Core
- ~~Teflon Cap~~
- Foil Cap

Storage:
- Wet Ice
- Dry Ice
- ~~Ambient~~

Preservative Added:
- H_2SO_4
- NaOH
- HNO_3
- Other ____

Cleaning Procedure:
- Low-High Concentration
- Detergent Wash
- Hexane Rinse
- Other Solvent Rinse-specify _____
- Water Rinse
- Acetone Rinse

ANALYSIS

Organics:
- ~~Volatiles~~
- Base/Neutral
- Acid
- Pesticide
- PCB
- TCLP Organics

Inorganics:
- Total Metals
- Cyanide
- TCLP Metals

RCRA:
- Ignitability
- Corrosivity
- Reactivity
- Other _____

REMARKS

Contains found at 10' - trench B 8

Ecology and Environment, Inc.
Field Sample Data Sheet

Site Name Cyb Tax County Wayne State MI

Collectors Dreckhaus, Arro, Laya EPA Site #

Sample # CTS Date Collected 8/4/ Temperature 75°F

Sample Tag # Time 1310

TRANSECT INFORMATION

Letter Compass Direction -

Station # Distance Between Stations to = ft.

GROUNDWATER

Water Table Depth ft.
Sample Depth ft.
Color
Odor
Oil
Device

SOIL

Device:
Auger
Core
Split Spoon
Cylinder Cup
Spade
Depth ft or in
Soil Type
Rock Silt
Gravel Muck
Sand Loam
Clay Peat
Color

SURFACE WATER

Color Odor
Temp pH
Stream Data (measure after sample collection)
Width ft
Depth ft or in
Velocity ft/sec
Flow Direction
Device:
Kemmerer
Bucket
Direct
Surface
Bottom

WASTE

Color Gray Odor N/A
Solid-Sludge-Liquid
Device:
Bucket
Trowel PID - 0 units
Core
Other Trackhoe

AIR

Media
Wind Dir.
Barom. Press.
Time Ran min
Avg Flow Rate l/min
Device

SEDIMENT

Color: Odor:
Bottom:
Ooze Sand
Gravel Clay
Rock Shell
Organic
Device:
Ponar
Eckman
Bucket
Trowel

SAMPLE PREPARATION

Container/Size:
Glass Jar
Plastic Jar
~~Acetate~~ Core
Teflon Cap
Foil Cap

Storage:
Wet Ice
Dry Ice
Ambient

Preservative Added:
H_2SO_4
NaOH
HNO_3
Other

Cleaning Procedure:
Low-High Concentration
Detergent Wash
Hexane Rinse
Other Solvent Rinse-specify
Water Rinse
Acetone Rinse

ANALYSIS

Organics:
Volatiles
Base/Neutral
Acid
Pesticide
PCB
TCLP Organics

Inorganics:
Total Metals
Cyanide
TCLP Metals

RCRA:
Ignitability
Corrosivity
Reactivity
Other

REMARKS

container found at 10' Depth Trench 8 8

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

PROJ. NO.: ZF2054 | PROJECT NAME: 705-9302-012 GibTcox

SAMPLERS: (Signature)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Total Mi. Metals (6010)	TCLP Mi. Metals (6010)	Semi VOCs (8270)	VOCs (8260)	Total Reactive CN	Ignitability (1010)	TCLP (8080)
ST1	8/3	0935		✓	West (Upgrad)	2	X	X			X		X
ST2	8/4	0845		✓	Center Hillside	1	X			X			X
ST3	8/4	1000		✓	East Hillside	1	X			X			X
ST4	8/4	1220		✓	Second Container	1	X		X	X		X	X
ST5	8/4	0820		✓	First Container	1	X		X	X		X	X

Contractor:
Clayton Environmental
2231 Rue Le, IN

REMARKS
New, MI, 48050

Non-Preservatives Samples are only cooled to 4°C

TURNAROUND TIME:
V. 14 cal days – Aug 20, 1993
H. 21 cal days – Aug 27, 1993

QA Level II Deliverables

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	8/6/93 1055				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		[signature]	8/6/93 1055	Send results to: Herb Langer Ecology & Environment 12251 Universal Taylor, MI 48180	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

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